

EdgeAccess



Universal Chassis System UCS 1001 User Manual



CAUTION!

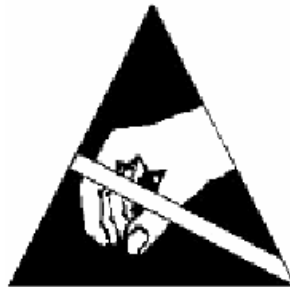
This product may contain a laser diode operating at a wavelength of 1300 nm - 1600 nm. Use of optical instruments (e.g., collimating optics) with this product may increase eye hazard. Use of controls or adjustments, or performing procedures other than those specified herein may result in hazardous radiation exposure.

Under normal conditions, the radiation levels emitted by this product are under Class 1 limits in 21 CFR Chapter 1, Subchapter J.

ATTENCION!

Cet équipement peut avoir une diode laser émettant à des longueurs d'onde allant de 1300nm à 1600nm. L'utilisation d'instruments optiques (par exemple : un collimateur optique) avec cet équipement peut s'avérer dangereuse pour les yeux. Procéder à des contrôles, des ajustements ou toute procédure autre que celles décrites ci-après peut provoquer une exposition dangereuse à des radiations.

Sous des conditions normales, le niveau des radiations émises par cet équipement est en dessous des limites prescrites dans CFR21, chapitre 1, sous chapitre J.



NOTICE!

This device contains static sensitive components. It should be handled only with proper ElectroStatic Discharge (ESD) grounding procedures.

NOTE!

Cet équipement contient des composants sensibles aux décharges électro-statiques. Il doit absolument être manipulé en respectant les règles de mise à la terre afin de prévenir de telles décharges.

NOTICE

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EdgeAccess®
Universal Chassis System
Model UCS 1001
User Manual

Product Number 6912600
Rev. F 01/2008

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Chapter 1

Overview

The Model 1001 Universal Chassis System (UCS) Chassis houses and supplies power to Canoga Perkins modules that are 5U high. Although the chassis is not managed, it supports up to two 5U-high modules, such as fiber optic modems, multiplexers, or media converters. The modules can either be unmanaged or be directly managed. Figure 1 shows the UCS 1001 with two modules.



Figure 1. UCS 1001 Chassis

The UCS 1001 supports one or two AC and/or DC power supplies in the chassis. The power supplies are installed at the factory and are not field-replaceable. An LED for each power supply lights green when the power is on. For specifications for the power supplies, see Chapter 3.

The chassis includes alarm input and output terminals on the rear panel. Use the ALM IN terminal to connect devices that supply alarm information. If the UCS 1001 receives notification of an alarm condition from another device, either the MAJ or MIN LED on the front panel lights. However, the alarm condition is not forwarded to any other equipment.

Use the ALM OUT terminal to connect to external devices that can receive alarm information. If an alarm condition occurs in a module in the chassis, the MAJ or MIN LED on the module lights and notification is sent to the external device.

The front panel includes one pushbutton, for alarm acknowledgement, and four LEDs: two for major and minor alarms and two for primary and secondary power. Table 1 shows the LED states and meanings. To clear a latched Minor or Major alarm, push the ALM ACK button.

Table 1. Front Panel LEDs

LED	State	Definition
PWR PRI/SEC	Off	No power
	Green	Power is on
ALARM, MAJ and MIN	Off	Normal
MIN	Amber	Minor alarm
MAJ	Red	Major alarm

Chapter 2

Installing and Setting Up the Chassis

This section describes how to set up and install the chassis.

Before setting up the chassis, make sure these items are available:

- Chassis with application modules
- Power cables; 14 or 16 gauge wire for DC power
- Contact wires for the Alarm Relays (optional)

Caution: *Equipment intended only for installation in a **RESTRICTED ACCESS LOCATION** accessible only to electrically skilled persons and electrically instructed persons with the proper authorization.*

Follow these steps to install the chassis:

1. Plan the installation, considering these characteristics:
 - Place the chassis within 7 ft. (2.134 m) of the power source.
 - Plan to use one or more of these locations for the connection to Earth Ground:
 - The bonding lug on the rear of the chassis, near the bottom
 - The grounding prong on the AC power cord
 - The ground of the -48 VDC terminal strip
 - The mounting hardware for the rack, if the rack is tied to Earth Ground
 - Place the chassis adjacent to other Canoga Perkins or related equipment.
 - Allow room for the cable management bracket(s) that channel the cables, allowing slack in the cables and providing a surface for securing with a tie-wrap.
2. Unpack the chassis, cables, and modules, and inspect all parts for damage and compare them with the packing list. Set the packaging aside in case you need to return the equipment.
3. Plug the wire from Earth Ground into the lug on the back of the chassis; this connects the chassis to Earth Ground. See Figure 2.
4. Mount the chassis in a standard 19-inch relay rack, in a 23-inch rack, or on a table top. The chassis ships with mounting brackets preconfigured for flush mounting in a standard 19-inch relay rack; you can reposition the brackets as needed.
 - For a 19-inch rack, position the chassis in the rack and secure the brackets to the rack with four screws.
 - For a 23-inch rack, remove the mounting screws for the 19-inch mounting brackets and secure the optional 23-inch mounting bracket with the screws, then position the chassis in the rack and secure the brackets to the rack with screws.
 - For a tabletop, select a flat surface in a secure location, turn the chassis up-side-down and attach the self-adhesive feet near the four corners of the chassis, then turn the chassis right-side up and place it on the flat surface.

5. At ALM OUT, on the rear panel, connect devices to receive alarm information; see Figure 2.
 - NO The contacts are open for normal operation and closed in a fault condition
 - COM The electrical common
 - NC The contacts are closed for normal operation and open in a fault condition
6. At ALM IN, on the rear panel, connect devices to supply alarm information; see Figure 2. Connect cabling from the + output on the device to IN+ on the UCS 1001 and from the - output to IN- on the UCS 1001; the internal alarm sense circuit is optically protected. Connect an optional Frame or Chassis Ground to CH_GND.



Figure 2. UCS 1001 Rear Panel

7. To connect power to the power supply(s), follow these steps:
 - For an AC supply, plug the power cord into the rear panel, then plug the cord into the power source.
 - For a DC supply, loosen the screws for the GND and VDC terminals on the rear panel, then slide the wires under the square washers, and tighten the screws. See Figure 1. Check the polarity and use an ohmmeter to verify that -48 VDC is not shorted to GND. Replace the shield over the terminals and connect the power cables to the power source.

Note: To turn off the power, unplug the AC power cord or turn off the DC supply.

8. Insert the modules into the chassis; for details, see the user manual for each module.
9. Install a cover on an unused slot.
10. Turn on the chassis power supply(s). All LEDs on all modules light amber during the power-on sequence, then the PWR LED(s) lights green.
11. To configure each module in the chassis, see the user manual for that module.

Chapter 3

Specifications

Physical Specifications

Chassis dimensions	1.72" H x 17.5" W x 14 D" (43.7 mm x 444.5 mm x 355.6 mm)
Chassis weight (unpopulated)	4.3 lbs. (1.95 kg)

Power

Redundancy:	Optional (AC/AC, DC/DC or AC/DC)
AC power supply (auto ranging):	Input: 35 W, 115/230 VAC, 350/200 mA, 50 to 60 Hz Heat dissipation, max: 82 BTU/hr
DC power supply:	Input: 35 W, -48 VDC, 0.75 A Max. Heat dissipation, max: 82 BTU/hr
Chassis total power consumption:	35 W Max.

Environment

Operating temperature:	0 to 50° C
Humidity:	10 to 95% (non-condensing)

Regulatory Compliance

- ETL, cETL (CAN/CSA-C22.2 No.60950/UL 60950)
- EN 60950
- EN 60825-1
- FCC Part 15B, class A
- EN 55022
- EN 55024
- EN 61000-3-2
- EN 61000-3-3
- C-Tick (AS/NZS 3548)
- NEBS Level 3
- CE Mark

Appendix A

Warranty Information

Current Warranty information is available on-line in the Client Login Area of the Canoga Perkins web site (www.canoga.com) or by contacting Technical Support at 800-360-6642 (voice) or fiber@canoga.com (email).



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